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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/852,484	05/10/2001	David John Nevill	PH/5-30706A	5851

26748 7590 01/23/2004

SYNGENTA CROP PROTECTION, INC.  
PATENT AND TRADEMARK DEPARTMENT  
410 SWING ROAD  
GREENSBORO, NC 27409

EXAMINER

CLARDY, S

ART UNIT PAPER NUMBER

1616

DATE MAILED: 01/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/852,484

Applicant(s)

NEVILL ET AL.

Examiner

S. Mark Clardy

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1616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 22-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 22-34, 37 and 38 is/are rejected.
- 7) ☐ Claim(s) 35 and 36 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

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Claims 22-38 are now pending in this application which was originally filed as a continuation of PCT/EP99/08559, filed November 8, 1999.

Applicants' claims are drawn to a method for the selective control of broad-leaf weeds and grasses in crops which are resistant to protoporphyrinogen oxidase (PPO) inhibitors comprising applying to the crops or their habitat, a composition comprising:

- a) butafenacil (compound A), a PPO inhibiting herbicide
- b) at least one additional pesticide (herbicide<sup>1</sup>, fungicide, insecticide).

Previous (now canceled) claims were drawn to compositions. Pages 10-326 are merely a generated list of permutations of herbicide combinations. No data is evident in the specification.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 22-34, 37, and 38 are again rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Hudetz et al (US 6,159,899) and Devine et al<sup>2</sup>.

Hudetz et al teach the combination of a compound of formula A, i.e., applicants' PPO inhibiting herbicide, butafenacil, in combination with other herbicides for the selective control of weeds in crops such as maize, rice, sugar cane, plantation crops, cotton, potatoes, and soybeans (abstract and col 1, lines 6-10). Several of applicants' secondary herbicides are listed (col 19, lines 11-40) including metolachlor, atrazine, glyphosate, and dimethenamide (also Tables B1,

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<sup>1</sup>The specification lists virtually every known herbicidal agent.

<sup>2</sup>Devine et al. *Physiology of Herbicide Action*. Section 8.4 "Inhibitors of protoporphyrinogen-oxidase". PTR Prentice Hall: NJ. P. 152-163. 1993.

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B3, B4, B6). Compositions further comprising safeners are not disclosed. While Hudetz et al does not specifically disclose application to PPO inhibitor resistant crops, this reference does define "crops" in the specification as meaning "crops that have been made tolerant to herbicides and classes of herbicides by conventional breeding or genetic engineering methods" (col 11, lines 25-28). Further, several combinations with imidazolinone herbicides are disclosed as being useful in maize that is resistant to imidazolinone herbicides. thus the concept of application to herbicide resistant crop plants is taught, and would suggest to one of ordinary skill in the art that compositions comprising bufentacil (compound A) and additional active agents would be useful in crop plants which are resistant to bufentacil.

Devine et al, again, teach that there were several known antagonists (safeners) of the PPO inhibiting herbicides such as the nitrodiphenylethers (Table 8.4, p. 157).

One of ordinary skill in the art would be motivated to combine these references because Devine et al teaches the utility of safener compounds in herbicidal compositions such as those comprising PPO inhibiting herbicides.

Thus, again, it would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to have combined applicants' PPO inhibiting herbicide butafenacil with additional pesticidal agents and safeners, because Hudetz et al teach the combination of butafenacil with secondary herbicides such as those claimed herein for use in treating crops which have been bred or designed to possess herbicidal resistance. Further, it is conventional in the art to make use of safeners for herbicides, several of which are disclosed in Devine et al.

Applicants' data, provided previously, shows herbicidal activity for butafenacil in combination with other herbicides: metolachlor, atrazine, nicosulfuron, mesotrione, metolachlor +

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atrazine, and metolachlor + mesotrione. However, in view of the teachings in Hudetz et al, discussed above, the claims do not appear allowable.

Claims 35 and 36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 35 and 36, drawn to safened butafenacil compositions comprising the safener cloquintocet, would be allowable because there is no teaching or suggestion in any reference of record that this safener would be useful in combination with butafenacil specifically, or a PPO inhibiting herbicide in general.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

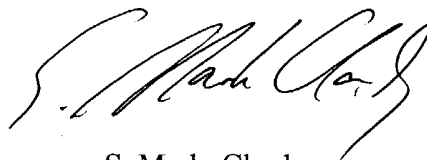
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to S. Mark Clardy whose telephone number is 703-308-4550. The examiner can normally be reached on 7:20 - 3:50.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman Page can be reached on 308-2927. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306. AU 1616 will be moving on February 3, 2004, after which, the examiner may be reached at 571-272-0611, and the SPE at ...-0602.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1235.

A handwritten signature in black ink, appearing to read "S. Mark Clardy". The signature is fluid and cursive, with a large, stylized initial "S" and a long, sweeping underline.

S. Mark Clardy  
Primary Examiner  
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January 21, 2004